

IN THE CLAIMS

Please amend the claims as follows:

1. (original) Circuit arrangement for operating a high pressure discharge lamp comprising

- input terminals for connection to a supply voltage source,
- a DC-DC-converter coupled to the input terminals for generating a DC current out of a supply voltage supplied by the supply voltage source and comprising
 - a control circuit for controlling the DC current at a value that is represented by a reference signal S_{ref} ,
 - a reference circuit for generating the reference signal S_{ref} , and an output capacitor,
- a commutator for commutating the polarity of the DC current and comprising lamp connection terminals and an ignition inductor,
- a first circuit part for modulating the reference signal S_{ref} at a modulation frequency that equals the frequency of the commutation of the DC current by subsequently
 - decreasing the reference signal S_{ref} by an amount ΔS_{ref} during a first time interval Δt_1 that starts a second time interval Δt_2 before each commutation of the DC current,

- maintaining the reference signal at the decreased value during a third time interval Δt_3 ,

- increasing the reference signal S_{ref} by an amount ΔS_{ref} during a fourth time interval Δt_4 ,

characterized in that the circuit arrangement further comprises

- a second circuit part for adjusting at least one parameter chosen from the group formed by ΔS_{ref} , Δt_1 , Δt_2 , Δt_3 and Δt_4 in dependency of a parameter chosen from the group formed by the power consumed by the lamp, the lamp voltage and the lamp current.

2. (original) Circuit arrangement according to claim 1, wherein the second circuit part comprises a memory in which one or more tables are stored, each of the tables comprising a range of lamp power levels and for each value of the lamp power level in the range a corresponding value for one or more of the parameters ΔS_{ref} , Δt_1 , Δt_2 , Δt_3 and Δt_4 .

3. (original) Circuit arrangement according to claim 2, wherein each of the tables comprises data for a predetermined range of the lamp voltage.

4. (original) Circuit arrangement according to claim 1, wherein the second circuit part comprises a memory in which a one or more tables are stored comprising a range of lamp voltage values and for each value of the lamp voltage in the range a corresponding value for one or more of the parameters ΔS_{ref} , Δt_1 , Δt_2 , Δt_3 and Δt_4 .

5. (original) Circuit arrangement according to claim 4, wherein each of the tables comprises data for a predetermined range of the lamp power.

6. (currently amended) Circuit arrangement according to ~~claims 1-5~~ claim 1, wherein the second circuit part comprises a microcontroller.